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CUSTOMER NO.: 24498

Serial No. 09/883,635

Reply to Office Action dated: 2/27/06

Response dated: 5/18/06

MAY 19 2006

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REMARKS

In the Office Action, the Examiner stated that claims 1-26 are pending in the application and that claims 1-5, 7, 9, 11, 12-18, 20, 22 and 24-26 stand rejected. The Examiner further stated that claims 6, 8, 10, 19 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the claims are amended by this response.

In view of the following discussion, the Applicant respectfully submits that none of these claims now pending in the application are anticipated under the provisions of 35 U.S.C. § 102 or obvious under the provisions of 35 U.S.C. § 103. Thus the Applicant believes that all of these claims are now in allowable form.

Rejections

A. 35 U.S.C. § 102

The Examiner rejected the Applicant's claims 1 and 14 under 35 U.S.C. § 102(b) as being anticipated by Kwon (U.S. Patent No. 5,418,658). The rejection is respectfully traversed.

The Examiner alleges that regarding claim 1, Kwon teaches in a rewritable storage medium, a method for changing a playback speed of a selected video segment having a progressive frame structure which has been recorded onto a portion of said storage medium, including all of the elements of the Applicant's invention. The Applicant respectfully disagrees.

The Applicant respectfully submits that Kwon absolutely fails to teach, suggest or anticipate all of the limitations and aspects of the invention of the Applicant, at least with respect to independent claim 1, which specifically recites:

In a rewritable storage medium, a method for changing a playback speed of a selected video segment having a progressive frame structure which has been recorded on a portion of said storage medium comprising the steps of:
modifying said selected video segment for a changed playback speed; and

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**recording said modified video segment exclusively on
said portion of said medium. (emphasis added).**

The Applicant's invention of at least claim 1 is directed, at least in part, to a method for changing a playback speed of a selected video segment including modifying a selected video segment recorded on a portion of a storage medium to form a modified video segment, and the modified video segment is recorded exclusively on the same portion of the storage medium, as recited in at least the Applicant's claim 1. In support of at least claim 1, the Applicant in the Specification specifically recites:

"In accordance with the inventive arrangements, a user may alter the playback speed of progressive frame video that has already been recorded onto a storage medium. If the user desires to edit the recorded video to produce slow motion video, then one or more pictures may be inserted into the video to create such an effect. The altered video can then be recorded onto the storage medium in the same space previously occupied by the original video. If the user desires to create fast-forward video, then one or more pictures may be removed from the recorded video. Similar to the slow motion editing process, the video can be recorded in the original video's medium space." (See Specification, page 12, lines 13-21).

As clearly evident from at least the portion of the Applicant's Specification presented above and claim 1, in the invention of the Applicant at least a portion of a progressive frame video is altered (modified) to change the playback speed as described above and the modified video is then stored in the same space (exclusively on said portion of said medium) previously occupied by the original video. Advantageously, the present invention enables a user to permanently record a modified video segment such that subsequent playback of the modified video segment does not require invocation of trick mode play but rather normal play (see, e.g., Applicants' specification, p. 2, lines 18-25).

In contrast to the invention of the Applicant, Kwon absolutely fails to teach, suggest or anticipate at least "modifying said selected video segment for a changed playback speed" and "recording said modified video segment exclusively on said portion of said medium" as taught in the Applicant's Specification and

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claimed by at least the Applicant's claim 1. More specifically, Kwon teaches an apparatus for recording and reproducing an encoded video signal from a source encoder comprising a decoder for performing a decoding process for the encoded video signal to produce a decoded video signal, an encoder block for compressing the decoded video signal using a spatial correlation to produce an intra mode compression signal, a buffer memory for storing the intra mode compression signal, **a mode controller for generating a clock pulse used to read out data in the buffer memory in accordance with a longer playing time recording and a normal playing time recording** and a recording and reproducing unit for recording and reproducing the intra mode compression signal read from the buffer memory. (See Kwon Abstract). (emphasis added).

The Examiner specifically cites col. 3 lines 42-45 of Kwon for teaching the modifying step of the Applicant's invention, at least with respect to the Applicant's claim 1. The Applicant respectfully disagrees. In col. 3, as pointed out by the Examiner, Kwon specifically recites:

"A mode controller 40 is used to generate a clock pulse for use to read out the data from the buffer memory 32 in order to achieve a multispeed recording operation, as used in a conventional analog VTR, which includes a standard mode for a normal playing time and an extended mode for a longer playing time. The mode controller 40 comprises a first pulse generator 42, a second pulse generator 44 and a multiplexer 46. The first pulse generator 42 produces a first read clock pulse having a clock frequency for the normal playing time and the second pulse generator 44 produces a second read clock pulse having a clock frequency for the longer playing time, wherein the clock frequency of the second clock pulse is lower than that of the first clock pulse." (See Kwon, col. 3, lines 39-53).

As evident from at least the portion of the disclosure of Kwon depicted above, in the invention of Kwon, a video segment is not modified to change a playback speed. More specifically, in Kwon, a first pulse generator produces a first read clock pulse having a clock frequency for controlling the normal playing time of a stored video segment and a second pulse generator produces a second read clock pulse having a clock frequency for controlling the longer playing time of the same stored video segment. This is in direct contrast to the teachings and claims

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of the Applicant's invention, which specifically claims in at least claim 1, "modifying said selected video segment for a changed playback speed". As such, the Applicant respectfully submits that Kwon absolutely fails to teach, suggest or anticipate at least "modifying said selected video segment for a changed playback speed" as taught in the Applicant's Specification and claimed by at least the Applicant's claim 1.

Even further, the Applicant respectfully submits that Kwon absolutely fails to teach, suggest or anticipate at least "recording said modified video segment exclusively on said portion of said medium" as taught in the Applicant's Specification and claimed by at least the Applicant's claim 1. The Examiner specifically cites col. 4 lines 15-35 of Kwon for teaching the recording step of the Applicant's invention, at least with respect to the Applicant's claim 1. The Applicant respectfully disagrees. In col. 4, as pointed out by the Examiner, Kwon specifically recites:

"When the reproducing operation is performed in the digital VTR, the recording/reproducing unit 34 reproduces the video signal recorded on the recording media under the control of a system controller (not shown) and provides it to the selector 14 through line 36. The system controller also causes the selector 14 to select the reproduced video signal from the recording/reproducing unit 34 and transfer it to the decoder 16. As described above, the decoder 16 performs the decoding operation for the reproduced video signal to produce a video signal for the longer playing time or the normal playing time depending on its multispeed recording mode, which will be indicated on a display (not shown). In connection with the reproducing operation, it will be appreciated that the reproduced video signal will pass through only the part that performs the intraframe coding within the decoder 16 because the reproduced video signal is coded in the intraframe mode within the encoder block 20 and recorded on the recording media." (See Kwon, col. 4, lines 16-35).

As evident from at least the portion of the disclosure of Kwon depicted above, in the invention of Kwon, a copy of a stored video segment is provided by a reproducing unit to a selector. The selector selects the reproduced video signal from the reproducing unit and transfers it to a decoder. As described above, the decoder performs the decoding operation for the reproduced video signal to

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produce a video signal for the longer playing time or the normal playing time depending on a multispeed recording mode. However, Kwon absolutely fails to teach, suggest or anticipate at least "recording said modified video segment exclusively on said portion of said medium" as taught in the Applicant's Specification and claimed by at least the Applicant's claim 1. That is, as described above, Kwon fails to teach modifying a selected video segment as taught and claimed by the Applicant, and further fails to teach, suggest or anticipate recording the modified video segment exclusively on the same portion of the medium as the original video segment was previously recorded.

That is, In contrast to Kwon, the invention of the Applicant modifies a selected video segment recorded on a portion of a storage medium to form a modified video segment, and the modified video segment is recorded exclusively on the portion of the storage medium, as recited in at least claim 1. Moreover, see, e.g., page 12, lines 13-21 of the Applicants' specification which disclose "a user may alter the playback speed of progressive frame video that has already been recorded onto a storage medium. If the user desires to edit the recorded video to produce slow motion video, then one or more pictures may be inserted into the video to create such an effect. **The altered video can then be recorded onto the storage medium in the same space previously occupied by the original video.** If the user desires to create fast-forward video, then one or more pictures may be removed from the recorded video. **Similar to the slow motion editing process, the video can be recorded in the original video's medium space**". Advantageously, the present invention allows a user to permanently record the modified video segment so that subsequent playback of the modified video segment does not require invocation of trick mode play but rather normal play (see, e.g., Applicants' specification, p. 2, lines 18-25).

The Applicant submits that a reference cited against a claim under 35 U.S.C. §102 must disclose each and every limitation of the rejected claim. Accordingly, independent claims 1 is patentably distinct and non-obvious over the cited reference for at least the reasons set forth above.

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Therefore, the Applicant submits that for at least the reasons recited above, independent claim 1 is not anticipated by the teachings of Kwon and, as such, fully satisfies the requirements of 35 U.S.C. § 102 and is patentable thereunder.

Likewise, independent claim 14 recites similar relevant features as recited in the Applicant's independent claim 1. As such, the Applicant submits that for at least the reasons recited above, independent claim 14 is also not anticipated by the teachings of Kwon and also fully satisfies the requirements of 35 U.S.C. § 102 and is patentable thereunder.

The Applicant reserves the right to establish the patentability of each of the claims individually in subsequent prosecution.

B. 35 U.S.C. § 103

The Examiner rejected the Applicant's claims 1-5, 7, 9, 11, 14-18, 20-22 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Eerenberg et al. (US Pat. No. 6,621,979) in view of Kwon (U.S. Patent No. 5,418,658). The rejection is respectfully traversed.

The Applicant respectfully submits that "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art" (MPEP §2143.03, citing *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)). Moreover, "[i]f an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious" (MPEP §2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)).

Claims 2-13 depend from Claim 1 or a claim which itself is dependent from Claim 1 and, thus, includes all the elements of Claim 1. Claims 15-26 depend from Claim 14 or a claim which itself is dependent from Claim 14 and, thus, include all the elements of Claim 14. Accordingly, Claims 2-13 and 15-26 are patentable distinct and non-obvious over at least the Kwon reference for at least the reasons set forth above with respect to Claims 1 and 14, respectively.

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In addition, the Applicant respectfully submits that claims 1-5, 7, 9, 11, 14-18, 20-22 and 24 are also patentable over Eerenberg et al. for at least the reasons set forth in the Applicant's response to a First Office Action dated 10/06/2005. That is, the Applicant submits that the teachings of Eerenberg et al. fail to bridge the substantial gap between the teachings of Kwon and the invention of the Applicant as described above.

More specifically, in Eerenberg et al., column 4, lines 51-67 and column 5, lines 1-27 simply describe the general principles of track select trick play, while FIG. 14 shows a GOP layout at the transport stream level, and FIG. 19 shows a recording apparatus. None of the cited sections of Eerenberg disclose the preceding limitations of Claims 1 and 14. In fact, such sections actually TEACH AWAY from the claimed invention. For example, column 5, lines 10-16 of Eerenberg disclose "[t]rack select trick play is based on the fact that head A and B cross pre-determined tracks. When such a system is realized, then it is possible to write information on tape in such a way that this data becomes visible during trick play. Consequence of this system is that this data can only be used for one trick play tape speed. For this reason, specific trick play AREAS are defined for different trick play speeds". Moreover, the Abstract of Eerenberg discloses "[a] trick play information stream is generated from a normal play stream, so that they can be recorded together as a composite information stream on the record carrier".

In contrast, the present invention modifies a selected video segment recorded on a portion of a storage medium to form a modified video segment, and the modified video segment is recorded exclusively on the portion of the storage medium, as essentially recited in Claims 1 and 14. That is, the selected video segment is modified, and then stored on the same portion as was the non-modified video segment. For example, the claims recite "the portion" and not "another portion" of the storage medium. Moreover, see, e.g., page 12, lines 13-21 of the Applicants' specification which disclose "a user may alter the playback speed of progressive frame video that has already been recorded onto a storage

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medium. If the user desires to edit the recorded video to produce slow motion video, then one or more pictures may be inserted into the video to create such an effect. **The altered video can then be recorded onto the storage medium in the same space previously occupied by the original video.** If the user desires to create fast-forward video, then one or more pictures may be removed from the recorded video. **Similar to the slow motion editing process, the video can be recorded in the original video's medium space.** Advantageously, the present invention allows a user to permanently record the modified video segment so that subsequent playback of the modified video segment do not require invocation of trick mode play but rather normal play (see, e.g., Applicants' specification, p. 2, lines 18-25).

Thus, while the present invention modifies a selected video segment stored on a portion of a storage medium and then stores the modified video segment at that portion, Eerenberg discloses the combining of a trick play information stream and a normal play information stream "so that they can be recorded as a composite information stream on the record carrier" (Eerenberg, Abstract).

Therefore, the Applicant submits that for at least the reasons recited above, independent claims 1 and 14 are not rendered obvious by the teachings of Kwon and Eerenberg et al., alone or in any allowable combination, and, as such, fully satisfy the requirements of 35 U.S.C. § 103 and are patentable thereunder.

Furthermore, dependent claims 2-13 and 15-26 depend either directly or indirectly from independent claims 1 and 14, respectively, and recite additional features therefor. As such and for at least the reasons set forth herein, the Applicant submits that dependent claims 2-13 and 15-26 are also not rendered obvious by the teachings of Kwon and Eerenberg et al., alone or in any allowable combination. Therefore the Applicant submits that dependent claims 2-13 and 15-26 also fully satisfy the requirements of 35 U.S.C. § 103 and are patentable thereunder.

The Applicant reserves the right to establish the patentability of each of the claims individually in subsequent prosecution.

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The Applicant would like to thank the Examiner for the indication of allowable subject matter. In particular, The Applicant agrees that claims 6, 8, 10, 19, 21 and 23 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, at this time the Applicant submits that all of the Applicant's claims are allowable over the cited prior art.

Conclusion

The Applicant submits that none of the claims, presently in the application, are anticipated under the provisions of 35 U.S.C. § 102 or obvious under the provisions of 35 U.S.C. § 103. Consequently, the Applicant believes that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

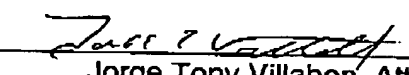
If however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion, it is respectfully requested that the Examiner telephone the undersigned.

No fee is believed due. However, if a fee is due, please charge the additional fee to Deposit Account No. 07-0832.

Respectfully submitted,

LIN et al.

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